

Sequence listings

SEQ ID NO 1:

rAsp f6 DNA sequence Length: 624

5 CAATACACGC TCCCACCCCT CCCCTACCCC TACGATGCCC TCCAACCCTA 50
 CATCTCCCAA CAGATCATGG AGCTGCACCA CAAAAAGCAC CATCAAACCT 100
 ACGTCAATGG CCTGAATGCC GCACTCGAGG CGCAGAAGAA AGCGGCGGAA 150
 GCCAACGACG TCCCCAAGCT CGTCTCCGTG CAGCAAGCGA TCAAATTCAA 200
 CGGCGGGGGG CACATCAACC ATTCCCTCTT CTGGAAGAAT CTGGCCCCGG 250
 AGAAATCCGG GGGTGGCAAG ATCGATCAGG CACCGGTCCT CAAAGCAGCC 300
 10 ATCGAGCAGC GTTGGGGATC CTTCGATAAG TTCAAGGATG CTTTCAACAC 350
 GACCCTGCTG GGCATTTCAGG GCAGCGGATG GGGTTGGTTA GTGACCGACG 400
 GACCCAAGGG AAAGCTAGAC ATTACCACAA CCCACGACCA GGATCCGGTG 450
 ACCGGGGCGG CCCCCGTCTT TGGGGTGGAT ATGTGGGAGC ATGCTTACTA 500
 CCTTCAGTAC TTGAACGACA AAGCCTCGTA TGCCAAGGGC ATCTGGAACG 550
 15 TGATCAACTG GGCTGAAGCG GAGAATCGGT ACATAGCGGG TGACAAGGGT 600
 GGACACCCAT TCATGAAGCT GTGA 624

SEQ ID NO 2:

rAsp f6 Amino acid sequence Length: 207

20 QYTLPLPLYP YDALQPYISQ QIMELHHKKH HQTYVNLNA ALEAQKKAAE 50
 ANDVPKLVSV QQAIKFNGGG HINHSLEWKN LAREKSGGGK IDQAPVLKAA 100
 IEQRWGSFDK FKDAFNTTLL GIQSGSGWL VTDGPKGKLD ITTTHDQDPV 150
 TGAAPVFGVD MWEHAYYLQY LNDKASYAKG IWNVINWAEA ENRYIAGDKG 200
 GHPFMKL 207

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SEQ ID NO 3:

rAsp f4 DNA sequence Length: 861

GGCGAGGTCG GCGACACTGT CTACGCTACT ATAAACGGTG TCCTCGTCTC 50
 GTGGATCAAC GAGTGGTCCG GCGAGGCTAA GACCTCCGAC GCTCCCGTCT 100
 30 CTCAGGCTAC TCCCGTCAGC AACGCTGTGG CTGCCGCCGC CGCCGCTTCT 150
 ACTCCGGAGC CCAGCTCTTC CCACTCCGAC AGTTCTTCAT CCTCCGGCGT 200
 CTCCGCCGAC TGGACCAACA CCCCTGCCGA AGGCGAGTAC TGCACTGACG 250
 GCTTCGGTGG CAGGACCGAA CCCAGCGGCT CCGGTATCTT CTACAAGGGC 300
 AACGTTGGTA AACCCTGGGG CAGCAACATC ATCGAGGTCT CCCCCGAGAA 350
 35 CGCCAAGAAG TACAAGCACG TCGCTCAGTT TGTTGGCAGC GACACTGACC 400
 CCTGGACCGT TGTCTTCTGG AACAAGATCG GCCCCGATGG TGGCCTTACT 450

GGCTGGTACG GTAAC TCCGC TCTGACCCTC CACCTCGAGG CCGGTGAGAC 500
 CAAGTACGTG GCATTGACG AGAACTCCCA GGTGCCTGG GGCGCCGCAA 550
 AGGGCGACGA GCTGCCCAAG GACCAGTTTG GTGGGTACTC TTGCACCTGG 600
 GGTGAGTTCG ACTTTGACAG CAAAATCAAC CACGGCTGGT CTGGCTGGGA 650
 5 CGTGTCCGCC ATTCAGGCCG AGAATGCCCA CCATGAGGTC CAGGGTATGA 700
 AGATCTGCAA TCACGCCGGC GAGCTCTGCT CCATCATCTC CCACGGTCTT 750
 TCCAAGGTCA TTGACGCCTA CACTGCTGAT CTGGCCGGTG TCGATGGCAT 800
 TGGTGGCAAG GTCGTCCCTG GCCCTACCCG TCTGGTCGTC AACCTCGACT 850
 ACAAGGAGTA G 861

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SEQ ID NO 4:

rAsp f4 Amino acid sequence Length: 286

GEVGD TVYAT INGVLVSWIN EWSGEAKTSD APVSQATPVS NAVAAAAAAS 50
 TPEPSSSHSD SSSSSGVSAD WTNTPAEGEY CTDGFGGRTE PSGSGIFYKG 100
 15 NVGKPWGSNI IEVSPENAKK YKHVAQFVGS DTDPTWTVFW NKIGPDGGLT 150
 GWYGN SALT L HLEAGETKYV AFDENSQGAW GAAKGDEL PK DQFGGYSCTW 200
 GEFDFDSKIN HGWSGWDVSA IQAENAHHEV QGMKICNHAG ELCSIISHGL 250
 SKVIDAYTAD LAGVDGIGGK VVPGPTRLV NLDYKE 286

20 SEQ ID NO 5

rAsp f8 DNA sequence Length: 336

ATGAAGTACC TCGCAGCTTT CCTCCTCCTC GCCCTTGCTG GCAACACCTC 50
 CCCGTCTCTT GAGGATGTCA AGGCCGTCCT CTCTTCCGTT GGCATTGATG 100
 CCGATGAGGA GCGCCTGAAC AAGCTCATTG CTGAGCTCGA GGGCAAGGAC 150
 25 CTCCAGGAGC TCATTGCCGA GGGTTCCACC AAGCTCGCTT CCGTTCCCTC 200
 CGGTGGTGCT GCCGCCGCTG CTCTGCCGC TGCCGGTGCC GCTGCCGGTG 250
 GTGCTGCTGC TCCTGCCGCT AAGGAGAAGA ATGAGGAGGA GAAGGAGGAG 300
 TCCGACGAGG ACATGGGCTT CGGTCTCTTC GACTAA 336

30 SEQ ID NO 6

rAsp f8 amino acid sequence Length: 111

MKYLA AFLLL ALAGNTSPSS EDVKAVLSSV GIDADEERLN KLIAELEGKD 50
 LQELIAEGST KLASVPSGGA AAAAPAAAGA AAGGAAAPAA KEKNEEEKEE 100
 SDEDMGFGLF D 111

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